

Rob Dickinson is in love with the Porsche 911—the car driven by Steve McQueen in the 1971 film "Le Mans." Porsche doesn't make it anymore, so Mr. Dickinson does.

His Los Angeles company, Singer Vehicle Design, takes the body of a Porsche car built before 1994, strips it down, then rebuilds it with carbon-fiber body parts, modern suspension and brakes, and an air-cooled engine supplied by Cosworth LLC, best known as a maker of Formula One race car motors.

"It's a Porsche. It's restored, done with authenticity, updated with as much new wisdom as we can have access to," says Mr. Dickinson. The price to buy a Singer 911: From \$190,000 to \$300,000, depending on specifications and materials.

Singer Vehicle Design is one of scores of companies turning out ultra-customized cars for wealthy aficionados. Low-volume car makers combine advanced computer design with parts from specialty makers to create replicas of mid-1960s Shelby Cobras, 1932 Ford hot rods, 1970's BMW 2002s and cars that Detroit or Munich never imagined. Some big auto makers encourage the replica and restoration industry by offering access to parts, or licensing designs, although sometimes there is friction over styling or branding that overlaps current products.

One reason is that many of these vehicles live in a regulatory limbo. Many custom cars are sold without engines or transmissions so they can be classified as a collection of vehicle parts to avoid federal crash-testing requirements. The Specialty Equipment Manufacturers Association, a trade group for the automotive performance-parts and customizing industry, is pushing Congress to pass a proposal backed by **Rep. John Campbell (R., Calif.)** that would exempt companies that build fewer than 1,000 cars a year from some of the most costly federal safety and environmental rules. The rationale: Fostering small car makers will create jobs.

The proposal's prospects are uncertain in Washington's turbulent political climate, but the congressional hot-rod caucus—formally known as the Automotive Performance and Motorsports Caucus—is a bipartisan group of nearly 100 lawmakers. It spans the ideological spectrum to from South Carolina Republican Sen. Jim DeMint to Massachusetts Democrat Sen. John Kerry.

In the meantime, the small companies that offer custom-designed cars and full-scale replicas are optimistic that affluent baby boomers will propel sales in coming years.

"It's boomer driven," says David Kinney, publisher of the Hagerty Price Guide, which tracks values for cars made from 1946 on. People in their 50s or 60s can now acquire the car they wanted in high school but "you could never afford or you didn't think you deserved," he says.

Some restored or custom cars are good investments, Mr. Kinney says. Others will be simply labors of love.

"If you're worried about what it costs, you're not ready," says Juan Lopez-Bonilla, who owns a graphics-design business in Louisville, Ky. He has purchased three customized replicas of a 1960s Shelby Cobra muscle car. Original Cobras can sell for millions of dollars. A number of companies make replicas at a wide range of price points.

Mr. Lopez-Bonilla's latest car, which cost about \$60,000, came from Superformance LLC, a company licensed by Cobra originator Carroll Shelby to produce replica bodies. Mr. Lopez-Bonilla's Superformance MKIII has a body assembled in South Africa, an engine custom-made in a shop in Ross, Ohio, and custom wire wheels fabricated in Dayton, Ohio.

"It is luscious," Mr. Lopez-Bonilla says of the Cobra's look.

Mr. Lopez-Bonilla says he researched his first Cobra replica purchase for three years to find a maker whose cars met his demands for performance and safety. For his latest Superformance MKIII, he tracked every step of his car's creation.

Hot rods that emulate the look of a 1930s Ford are an even more popular genre. "We build eight to 10 chassis a week, about five Cobra replicas and five hot rods," says David Smith, who runs Factory Five Racing Inc., a kit-car maker in Wareham, Mass.

Mr. Smith's designers use specialized computer-aided design software to model the car's tube steel chassis. Factory Five's hot rod isn't an exact replica of a 1930s Ford. It is wider and lower and designed to handle and brake like a modern high-performance car.

Mr. Smith delivers a "car in a box," without an engine or transmission. Customers buy those components separately and do the installation work themselves or find another shop to assemble the pieces. Engines and transmissions are "high dollar and low margin parts," Mr. Smith says.

Fans of early 1970s BMW 2002s are another vibrant subculture. Surviving specimens of the nimble, compact car that established BMW AG's foothold in the U.S. are beloved, but not always roadworthy.

Matt McGinn, owner of Sports Car Restoration in Plainville, Conn., says a customer recently brought him a 1972 BMW 2002 that his father had purchased new. Beyond restoring the body and interior, Mr. McGinn installed a high performance, four-cylinder engine from a 1980s BMW M3, along with a custom motor mounts and an oil cooling system.

"On the outside, the only difference ... is that it has period correct Italian wheels," he says. But the engine gives the car about twice the power of a stock 2002.

Of course, some people dream of cars that never were, and thanks to digital design technology, they can now have them. One such is the 789 model created by n2a Motors, based in Orange County, Calif. The name is shorthand for "no two alike." Owner Gene Langmesser, who worked at General Motors and later Porsche before acquiring a concept-car studio in California.

Mr. Langmesser says he designed the 789 with a goal to "stop people in their tracks." The 789 combines the front end of a 1957 Chevrolet, the mid-section of a 1958 Impala, and the bold tail fins of a 1959 Chevy (hence the name, 789). The flamboyant body, which has a base price of \$80,000, rests on the chassis of a modern Corvette that retails for about \$60,000. N2a offers many ways to spend more, including a engine that puts out up to 800 horsepower. Each 789 is built to a customer's order.

Mr. Langmesser says he has sold 35 to 40 of the cars. N2a offers another car designed to fit on a Corvette chassis. Called the Anteros, its lines are sleek and modern like an ultra-luxury Aston-Martin or Maserati. The price ranges from \$149,500 to \$176,500 and above, depending on upgrades.

"Everyone loves that car," Mr. Langmesser says. "I can't get anyone to write a check for it."